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| 32692 | 7590 | 11/15/2005 | EXAMINER | |
| 3M INNOVATIVE PROPERTIES COMPANY | | | PATEL, ASHOK | |
| PO BOX 33427 | | | ART UNIT | |
| ST. PAUL, MN 55133-3427 | | | PAPER NUMBER | |
| | | | 2879 | |

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,337

Applicant(s)

PADIYATH ET AL.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 28-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4 pages</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election of Group I, claims 1-27 in the reply filed on 09/02/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 28-34 are withdrawn from consideration. An action on merits including claims 1-27 appears below.

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;

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(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the electrical contacts" at line 5 of the claim lacks proper antecedent basis. There are four contacts in two segments, namely: a first electrical contact of the first segment, a second electrical contact of the first segment, a second electrical contact of the first segment, and a second electrical contact of the second segment. It remains unclear as to which contacts are being referred to.

As to claim 23, the term "the sign" lacks antecedent basis. Since claim 22 recites the sign, it appears that claim 23 is intended to be dependent on claim 22, not claim 1. The Examiner however treats the claim as being dependent on claim 1 since claim 23 also recites the display.

Claims 2-27 are necessarily rejected since they depend upon claim 1.

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4. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are (specifically) individual electrical contacts. The term "electrical contacts" in its broad and vague term refers to many electrical contacts, such as: a first electrical contact of the first segment and a second electrical contact of the first segment, which, when joined electrically, would render the device inoperative. Similarly, a first electrical contact of the second segment, a second electrical contact of the second segment would render the device inoperative.

Claims 2-27 are necessarily rejected since they depend upon claim 1.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-5, 11-13 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Koike et al (USPN 6,345,903).

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Koike et al disclose applicant's claimed organic electronic device (at least Figures 2, 3, 6, 7) including at least two segments (at least two LEDs shown in Figure 6), each segment having an organic electronic light-emitting device (11) defined by peripheral edges (left and right); wherein each segment includes a first electrical contact (13) disposed on a first peripheral edge and a second electrical contact (14) disposed on a different (opposite) peripheral edge than the first electrical contact and the electrical contacts (19a, 19b as shown in Figure 3) of the segments are joined in electrical communication with a conductive material (16a, 16b etc).

Koike et al disclose the device as organic (see col. 5, lines 39-67).

As to claim 3, as shown in Figure 4 and 5, Koike et al disclose the second electrical contact disposed on a peripheral edge that is substantially parallel to the first peripheral edge.

As to claim 4, as shown in Figure 4 and 5, Koike et al disclose each segment including a continuous substrate layer and the substrate layer is discontinuous between segments.

As to claim 5, Koike et al does disclose each segment including a light-emitting layer (formed by diode 15) disposed

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between two conductive layers (13, 14) electrically isolated from each other.

As to claim 11, as shown in Figure 4 and 5, Koike et al disclose the electrical contacts joined in parallel.

As to claims 12, 13, 18 and 21, as shown in Figure 4 and 5, Koike et al disclose the device including a plurality of segments joined in a row and a plurality of rows joined in a column; the device is a pixilated display.

As to claims 19 and 20, as shown in Figures 8-10 and 14, Koike et al disclose each or all segments being encapsulated.

As to claims 22 and 23, applicant is the device of claim 1 to be used for an article selected from a lamp, a display, a sign, a toy, personal protection apparel or a fixed or variable message. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed/used does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

As to claim 24, Koike et al disclose the device emitting at least a single color.

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 2, 6-10, 14-17 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al, as applied above to claim 1.

As to claim 2, Koike et al do not disclose the second electrical contact disposed on a peripheral edge that is substantially perpendicular to the first peripheral edge. However, depending upon a type of design need, it would have been obvious to one of ordinary skill in the art to modify Koike et al's device to provide the contacts in either parallel or perpendicular simply by altering layout of the connectors from parallel to series. In light of this, Koike et al would have suggested to alter the device and provide the second electrical

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contact disposed perpendicular to the first peripheral edge for providing an alternative design.

As to claims 6-9 and 27, Koike et al do not disclose the conductive material being flexible. However, since the electrical connection could be provided in any suitable appropriate form so long as it is compatible with the design, it would have been a matter of obvious design choice to one of ordinary skill in the art to provide the conductive material of flexible or rigid.

As to claim 10, Koike et al do not disclose the electrical contacts joined in series, as claimed by applicant. However, depending upon a type of design need, it would have been obvious to one of ordinary skill in the art to modify Koike et al's device to provide the electrical contacts in either parallel or series simply by cascading the electrical contacts in series rather than in parallel. In light of this, Koike et al would have suggested to modify the device and provide the series connection of the electrical contacts for providing an alternative design.

As to claims 14-17 and 26, applicant is claiming different dimensions of the segments, not disclose by Koike et al. However, variations of different dimensions would have been obvious modifications it has been held that where general

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conditions of the claim are discovered in the prior art, discovering the various modification of the dimensions involves only routine skill in the art. In re Aller, 105 USPQ 233.

As to claim 25, although Koike et al do not disclose independent adjustable segments emitting different colors, providing applicant's claimed arrangement would have been obvious to one of ordinary skill in the art simply by providing desired different color emitting diodes and by modifying electrical connections to the diodes.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakaya et al is cited for showing an organic electronic device including segments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information

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for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ashok Patel
Primary Examiner
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